ABSTRACT

VIDEO SIGNAL ENCODING AND BUFFER MANAGEMENT

A method of, and apparatus for, encoding and multiplexing a digital video picture are provided using intra-coded fields only at a relatively high bitrate, with each picture being encoded as a sequence of slices from the video image field. The encoding suitably complies with MPEG or similar requirements, and the intra-coding is further constrained so that the maximum number of bits for each slice in the picture is limited, and the delivery schedule of the bits to a decoder is more tightly constrained than is implied by the MPEG decoding models. In this way it is possible to build a high quality, low cost MPEG (or similar) encoder and decoder for video communications over digital interconnection standards such as IEEE 1394.

(Figure 6)

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